

Army's Newest Helicopter Blends Aviation Traditions with Innovation

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The UH-72A Lakota, the Army's newest helicopter, is the latest in a long line of successful aircraft aiding Soldiers in carrying out diverse missions around the globe. It is a product of the Light Utility Helicopter (LUH) program started in early 2004. On June 30, 2006, the Army awarded a contract to EADS North America to provide and support the Lakota. It is replacing aging UH-1 and OH-58A/C aircraft used by the Army National Guard (ARNG) and at test and training centers across the United States, its territories, and in Germany.

A UH-72A Lakota lands during a training exercise at Fort Polk, LA. (U.S. Army photo courtesy of Fort Polk.)

The UH-72A is named after one of the tribes that make up the Sioux Nation. The Lakota live primarily in southern South Dakota. The Lakota tribe considered that killing an enemy was disrespectful; the noncombat, support role of the UH-72A reflects that philosophy. The Lakota name reflects the intended missions of the aircraft and its contributions to homeland defense, medical care, and natural disaster response.

A Unique, Innovative Solution

The UH-72A's contribution to the history of Army rotary-wing aviation represents an innovative solution to rapidly improve capability and get it into the hands of the Soldier. The Lakota is unique to Army aviation because it is a variant of a commercial aircraft, the Eurocopter EC-145. The UH-72A is certified by the Federal Aviation Administration (FAA) rather than by the Army and is flown and maintained in accordance with FAA requirements. Everything on the aircraft except for the ARC-231 secure radio is commercially available as well and is certified by the FAA. Given that the Lakota is intended to fly in nonhostile and permissive environments, only the

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FAA certification allowed a quicker acquisition and fielding of the aircraft that is rapidly retiring the UH-1 and OH-58A/C, which have become increasingly expensive to operate and maintain.

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The EC-145 is a modern twin-engine aircraft that performs test and training support, medical evacuation (MEDEVAC), counter-drug, natural disaster response, transport, and general support missions. A total of 345 aircraft will be purchased, with 210 ultimately fielded to the ARNG and the rest to the

Active Army. They will serve in the United States, some territories, and Germany.

The aircraft has two basic configurations with specific Mission Equipment Packages (MEPs) for some missions. The standard configuration carries two pilots and up to six passengers, and the MEDEVAC configuration carries two pilots, up to three passengers, and two litters that are mounted to the floor. The MEDEVAC aircraft also has racks to support the carriage of equipment such as defibrillators, pumps, and intravenous supplies.

As of June 1, 2010, the Army had received 110 of the Lakotas; 97 were fielded to units, and 4 were designated for the Army's Space and Missile Defense Command for use at Kwajalein Atoll in the Pacific Ocean. The aircraft are also being fielded to Yakima Training Center



A UH-72A Lakota supports a training mission at Fort Polk. (U.S. Army photo courtesy of Fort Polk.)

in Washington state and the Tennessee National Guard. These latest units will join others at Fort Irwin; Fort Polk; Fort Rucker, AL; Fort Eustis, VA; the U.S. Military Academy; and Germany, flying with the Active Army. The UH-72A is also used by the ARNG in Louisiana, Mississippi, Texas, Florida, Alabama, Arkansas, Pennsylvania, North and South Carolina, Vermont, Puerto Rico, and Washington, DC.

The aircraft are assembled, flight tested, and delivered from the American Eurocopter facility in Columbus, MS. Production of the EC-145 was transitioned from the main Eurocopter plant at Donauwörth, Germany, over 4 years. This process has allowed the plant to reach a production peak rate of 4–5 aircraft a month. At the same time, American Eurocopter sought out and invested in American suppliers to support this production, which has increased the contribution American industry is making to the LUH program.

Mission Equipment Packages

To further increase the capability of the UH-72A, the Army and its contractor team are developing and integrating MEPs. There have also been additions of equipment to aid operations and the reliability, availability, and maintainability of the aircraft as it has entered service. These include the installation of the AN/ARC-231 radio to provide secure communications, examination of coatings for the rotor blades and windshields to improve wear in extreme environments, and use of medical equipment storage racks.

The two major MEP kits being developed for this aircraft are for the



The District of Columbia Army National Guard flies its new UH-72A Lakotas over the city in support of transition training. (U.S. Army photo by SSG Jon Soucy.)

ARNG Security and Support (S&S) mission and to support training at the Combined Training Centers (CTCs) at Forts Irwin and Polk and in Germany. The S&S MEP includes an electro-optical sensor, searchlight, laser pointer, and equipment to collect data and transmit it to ground stations. The CTC MEP has increased radios, a loudspeaker, and equipment to simulate shooting and being shot at. The acquisition of these MEP kits to maintain the commerciality and FAA certification has been led by the contractor and maximizes the use of commercial parts and equipment. This process again demonstrates the innovative underpinnings of the UH-72A program.

The UH-72A Lakota has quickly been deployed with the Army, providing improved capability and availability. The more than 100 Lakotas flying with the ARNG and Active Army units have amassed more than 30,000 flight hours in 3 years. An additional 80 aircraft will enter service by the end

of 2011, accelerating the retirement of the UH-1 and OH-58 from service. The UH-72A Lakota has proudly taken its place alongside the other aircraft of Army aviation, fulfilling the needs of its operators and contributing to the security and safety of the United States and its people.

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